



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,617	11/13/2003	David F. Bednarek	1062/D91	2524
2101	7590	09/29/2006	EXAMINER	
BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			MANOHARAN, VIRGINIA	
			ART UNIT	PAPER NUMBER
			1764	
DATE MAILED: 09/29/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/713,617

Applicant(s)

BEDNAREK ET AL.

Examiner

Virginia Manoharan

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-102 is/are pending in the application.
- 4a) Of the above claim(s) 33,34 and 60-81 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32,35-59 and 82-102 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' election of Group I, claims 1-32, 35-59 and 82-102 in the reply filed on July 17, 2006 is acknowledged. Because applicants did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g., typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-24, 29, 32, 37, 40, 57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a). The inconsistent used of terminologies in the claims is improper. For examples only:

- 1). "an input" in claim 1, line 2, as opposed to "the intake" in claim 9, line 2;
- 2). "distilled liquid product" in claim 1, last line, as opposed to "condensed liquid product" in claim 8, line 2;
- 3). "eccentric rotor" in claim 1, d), ii, as opposed to "the drive" in claim 16; and
- 4). "vaporizer" in claim 1, as opposed to "the evaporator" in claim 102

Art Unit: 1764

b). Claims 10, 12, 14, 32, 37, 57, 86-90, 92, 99 and 101, as recited, are in improper Markush language. ---Wherein R is A, B or C---and --Wherein R is selected from a group consisting of – would both constitute proper Markush languages.

c). The following claimed languages fail to ascertain the claimed invention with precision:

- 1). “other suitable pre-treatment process”, claim 10, any last line;
- 2). “ at appropriate intervals” in claim 20, lines 2 and claim 29, line 2;
- 3). “or related thermal or pressure transducer”, claim 12, line 2;
- 4). “a number of heat sources” claim 32, line 2;
- 5). “suitable for maintaining potability”, claim 87; and
- 6). “or any other non-corrosive material”, claims 99 and 101.(All Underlinings Supplied).

c). Regarding claims 99 and 101, the phrase "for example" renders the claims indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

d).The claimed “in such a way” in claim 36, and “are configured” in claim 102 are superfluous especially since the way and configuration in terms of structure have not been specified respectively.

e). The following claimed languages such as: “the blowdown stream” in claim 8; and “the core vaporizer tubes” in claim 6 & claim 40, line 3 lack proper antecedent supports

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

Art Unit: 1764

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18, 25 and 35 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 and 37-42 of copending Application No. 10/713,591 in view of Kraner (6,497,555).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the instant claims is covered in the claims of the above co-pending application and vice-versa. Also, claim 1 of the above application recites in section e) of claim 1, "an electric motor having a motor rotor and motor magnets to power the drive shaft wherein the motor rotor and magnets are hermetically sealed within a liquid fluid pressure boundary of the liquid ring pump", not recited in the instant claims. However, Kraner suggests that the above claimed electric motor is known in the art. See col. 1, lines 45-51.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-18, 25 and 35 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-15 and 37-42 of copending Application No. 10/713,591. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: a liquid distillation system comprising: an input for receiving untreated liquid; a vaporizer coupled to the input for transforming the liquid to vapor; a head chamber for collecting vapor from the vaporizer; a pump comprising an internal drive shaft; and an eccentric rotor with a rotatable housing; and a condenser in communication with the vapor pump for transforming compressed vapor into a distilled liquid product.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18, 24, 35-40, 52-59, and 82-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1211236 or Huse (3,956,072) in view of Stewart (1,668,532).

Either GB '236 or Huse discloses substantially the apparatus and method as claimed including a liquid distillation system comprising an input for receiving untreated liquid; a vaporizer coupled to the input for transforming the liquid to vapor; a head chamber for collecting vapor from the vaporizer a vapor pump for compressing the vapor; and a condenser in communication with the vapor pump for transforming compressed vapor into a distilled liquid product. It would have been obvious to one of ordinary skill in the art to modify the apparatus and method of GB '236 or Huse such that the vapor pump is comprised of an internal drive shaft; and an eccentric rotor with a rotatable housing as such is conventionally done in the art as taught by Stewart. See the claims of Stewart at pages 3 and 4.

Claims 19-23, 25-32, and 41-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1211236 or Huse (3,956,072) as modified by Stewart (1,668,532) as applied to claims 1-18, 24, 35-40, 52-59, and 82-102 above, and further in view of Benian (5,667,683) or Cooksley (4,045,293).

The claimed multi-unit filter having at least two units in the input for filtering the liquid before the liquid is received by the vaporizer in claim 18 and section f) of claim 25; and further the claimed siphon pump to pump liquid into the vapor pump recited in claim 35 are known expediciencies as taught e.g., by Benian, noting the abstract and col. 4, lines 61-67 to col. 5 and col. 6. lines 1-29. It would have been obvious to incorporate the

Art Unit: 1764

filtering means and pump in the manner taught by Benian to the apparatus and method of GB'236 or Huse, to arrive at the claimed invention, so as to derive the advantages suggested at col.3, lines 3-60 of the Benian's reference; and since Benian filters function in conjunction with a distillation system as claimed. Cooksley discloses similar structural elements as above. See Figs. 1-15.

Claims 10, 37 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1211236 or Huse (3,956,072) as modified by Stewart (1,668,532) as applied to claims 1-18, 24, 35-40, 52-59, and 82-102 above, and further in view Trusch (4,316,774) or Kikkawa et al (4,437,933).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to subject to pre-treatment and post treatment the fluid being processed as such are known in the art as taught by either Trusch or Kikkawa in order to obtain a more desired purified product.

Claims 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1211236 or Huse (3,956,072) as modified by Stewart (1,668,532) as applied to claims 1-18, 24, 35-40, 52-59, and 82-102 above, and further in view Sneed et al (3,603,082) or Straka (5,761,903).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to couple a clean-burning generator to the system and method of distilling a liquid in either of the primary references in the manner as taught by Sneed et al or Straka in order to obtain the advantages suggested e.g., at col. 3, lines 32-45 of Straka; and at col. 6, lines 24-33 of the Sneed reference.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a). Brasz and de Cachard et al both disclose devices with eccentric rotors.
- b). Hawk et al, Kass and Nunez all disclose an apparatus including filters with backwashing capabilities.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (571) 272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


VIRGINIA MANOHARAN
PRIMARY EXAMINER
ART UNIT 133 1764